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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,497	09/19/2003	Alexander T. Chenvainu	00216-616001 / OB-211	9179
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EXAMINER				
GUIDOTTI, LAURA COLE				
ART UNIT		PAPER NUMBER		
3723				
MAIL DATE		DELIVERY MODE		
07/08/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/666,497

**Applicant(s)**

CHENVAINU ET AL.

**Examiner**

Laura C. Guidotti

**Art Unit**

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**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 35, 37-39, 41-46 and 48-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 35, 37-39, 41-46 and 48-53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 0508
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 13 May 2008 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 35, 38-39, 41-43, 45-46, and 48-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weihrauch, US 6,421,867 in view of Braun et al., WO 02/38004 and further in view of Kressner et al., US 6,021,538.

Weihrauch discloses the claimed invention including a power toothbrush comprising a handle (not shown, attached to rightmost end of "14" in Figure 7), a neck extending from the handle (rightmost end of "14" in Figure 7), inherently a motor in the handle to cause the motion shown by the directional arrows in Figure 7 (Column 3 Lines 41-46), a head including a support member (14), the support member including a lower portion "constructed to be" rotationally oscillated relative to a neck of the toothbrush (lower portion is the bottommost portion of "14"; directional arrow 16 shows rotational oscillation that is capable of being relative to a neck, Column 3 Lines 43-46), and a top surface having an elongated shape that appears to be oval or a rounded diamond (see Figures 6 and 8), a major axis of the elongated shape being disposed generally parallel to a long axis of the handle (Figures 6 and 8), and a plurality of tufts of bristles extending from the support member (18). There is also a second group of other tufts of bristles (bristle enveloping surfaces, 7) that also extend from the support member in order to clean interdental spaces (Column 2 Lines 15-17), however Weihrauch does not disclose a plurality of elastomeric fins pivotably mounted in and extending from the support member. Also, Weihrauch does not disclose a length, width, or an overall surface area of the toothbrush head.

Braun et al. disclose the claimed invention including a support member (12), the support member including a lower portion (24) and a top surface (22) having an

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elongated shape such as an oval (see Figure 1), a plurality of tufts of bristles extending from the support member (14), and a plurality of elastomeric fins pivotally mounted in and extending from the support member (16, Figure 3, Page 3 Line 2), each fin having a textured surface (as each fin inherently has a "texture"). The tufts of bristles and elastomeric fins have at least three different heights (see Figure 1). The tufts of bristles and elastomeric fins are arranged so that their tips define a rounded contour (see Figure 1). The pivoted fins are to fit between teeth to clean the interdental spaces (Page 3 Lines 2-3).

Kressner et al. disclose a toothbrush head having a support member with a top surface having an overall surface area from about 170 to 200mm<sup>2</sup> (Column 3 Lines 47-50; when the diameter is 15mm the area is 176.625 mm<sup>2</sup>.) The top surface has a major of 15mm, which falls into the range of having a length of about 14 to 19 mm and a width of about 12 to 15mm (see Column 3 Lines 47-50).

It would have been obvious for one of ordinary skill in the art at the time of the invention to substitute the interdental bristle enveloping surface Weihrauch for the interdental tooth cleaning elements that include elastomeric fins pivotally mounted in and extending from the support member, as Braun et al. teach, in order to provide fins for enhanced cleaning of interdental spaces in between teeth and also it would have been obvious for one of ordinary skill in the art to modify the specific dimensions of the support member of the toothbrush head of Weihrauch and Braun et al. to have an overall surface area from about 170 to 200mm<sup>2</sup>, a length of about 14 to 19 mm, and a

width of 12 to 15 mm, as Kressner et al. teach, in order to have a reasonable sized toothbrush head capable of sufficiently cleaning the oral cavity.

3. Claims 37, 44, and 50-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weihrauch, US 6,421,867, Braun et al., WO 02/38004, and Kressner et al., US 6,021,538 in view of Nishioka, US 4,373,541.

Weihrauch, Braun et al., and Kressner disclose all elements previously mentioned above, however do not disclose that the textured surface of the elastomeric fins includes ribs.

Nishioka teaches tooth cleaning elements wherein the surfaces have been given a texture in the form of ribs (Figures 10-12) so that the cleaning elements are more abrasive to allow for increased cleaning of tooth surfaces (Column 1 Lines 13-44).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the elastomeric fins of Weihrauch, Braun et al., and Kressner to include ribs as part of its textured surface, as Nishioka teaches, so that the fins provide abrasive cleaning surfaces advantageous for the cleaning of tooth surfaces.

#### ***Response to Arguments***

4. Applicant's arguments with respect to claims 35, 37-39, 41-46, and 48-53 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Guidotti whose telephone number is (571) 272-

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1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Laura C Guidotti/  
Primary Examiner, Art Unit 3723

lcg